

Work Order ID 84785

\*84785\*

Page 1

Item ID: D206-642-541

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube

Start Date: 23/05/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/05/13 Tooling:

Date:

QC:

Date: SPC (Y/N):

Date:

Run Start \*NR1\*

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3274	D								

100

0.00

\*100\*

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-541

CHG003

1 12/05/13  
N/A 12/05/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84785

**\*84785\***

Page 2

Item ID: D206-642-541

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop

**\*NS2\***

Start Date: 23/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

110

0.00

**\*110\***

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

\*\*\*\*VERIFY AND INSPECT THE MATERIAL PRIOR TO USE\*\*\*\*

1- Bend FWD end of tube using bend prog D3274 FWD and foil 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and OSI004

AR Aluminum Rod Batch: MI20164

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D. Drill 3/16" pilot holes as per Dwg D3274

8 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

DE 12/07/11

BE 12/07/12

DE 12/07/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Work Order ID 84785

May-23-12 9:22:39 AM

**\*84785\***

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Item ID: D206-642-541

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**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Replacement Skidtube

Start Date: 23/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

114

QC5- Inspect part completeness to step on W/O

0.00

**\*114\***

QC

Memo

0.00

Quality Control

116

QC10- Inspect visual per QSI004- ground welds

0.00

**\*116\***

QC

Memo

0.00

Quality Control

120

Chemical Conversion Coat per QSI005 4.1

0.00

**\*120\***

HandFinish

Memo

0.00

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Work Order ID 84785

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May-23-12 9:22:39 AM

Item ID: D206-642-541

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 23/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC7-Inspect Chemical Conversion Coat	0.00							
<b>*130*</b>									
QC	Memo	0.00				1			<i>BE</i> 12/07/30
Quality Control									
150		0.00							
<b>*150*</b>									
Skidtubes	Skidtubes	0.00							
Skidtubes	Memo	0.00							
Skidtubes	1-Open Ø0.313" and 0.375" crossbolt spacer holes as per Dwg D3274								
	2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube								
	3-Bond web in place as per Dwg D3274 & QSI 015.								
	A/RSikaflex-291 <i>11/20/12</i>								
	Sikaflex expire date: <i>13/03/14</i>								
	Start: <i>12-07-30</i> Time: <i>10:00</i>								
	Finish: <i>12-08-21</i> Time: <i>2:00</i>								
	(Adhere for 12 hours)								

*1* *BE* 12-07-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Item ID: D206-642-541

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Replacement Skidtube

Start Date: 23/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00

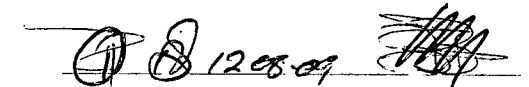
**\*160\***

QC

Memo

0.00

Quality Control



170

Skidtubes

0.00

**\*170\***

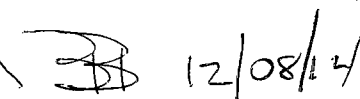
Skidtubes

Memo

0.00

Skidtubes

1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.

*- DC 12/08/10*2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2  
OPEN HOLES TO .297" . Debur3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD  
END OF TUBE  
DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)  
REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES

4- Countersink crossbolt spacer holes as per Dwg D3274

5- prepare for welding

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84785

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May-23-12 9:22:39 AM

Item ID: D206-642-541

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 23/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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180 QC5- Inspect part completeness to step on W/O

0.00

**\*180\***

QC

Memo

0.00

Quality Control

190

0.00

**\*190\***

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod

A/RAluminum Rod

3-Grind cross bolt welds flush as per Dwg D3274.

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr

3.00"  
4.4"

BE 12/08/21  
CF 12-8-22

DP 12-8-23

DAS  
18  
8-83

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84785

**\*84785\***

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May-23-12 9:22:39 AM

Item ID: D206-642-541

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 23/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	QC5- Inspect part completeness to step on W/O	0.00							
<b>*200*</b>									
QC	Memo	0.00							
Quality Control									
210	QC10- Inspect visual per QSI004- ground welds	0.00							
<b>*210*</b>									
QC	Memo	0.00							
Quality Control									
220	Pressure Wash per QSI005 4.3	0.00							
<b>*220*</b>									
HandFinish	Memo	0.00							
Hand Finishing	Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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# Work Order ID 84785

**\*84785\***

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May-23-12 9:22:39 AM

Item ID: D206-642-541

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**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 23/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***  
Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230 <b>*230*</b> Powdercoat Powder Coating  m121841	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum  Memo START TIME: 10:45 OVEN TEMPERATURE: 320°F FINISH TIME: 11:15	0.00				1X			MA 12/08/27
240 <b>*240*</b> QC Quality Control	QC3- Inspect Part Finish  Memo	0.00				1x	d	M	12/08/27
250 <b>*250*</b> HandFinish Hand Finishing	HandFinishing  Memo 1-Install Nut Plate as per Dwg D3274. Apply LPS-PROCYON to Nut Plate and rivets. A/RN/ALPS-PROCYON 1114596 2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a A/RSikaflex-291 122443 Sikaflex expire date: 13/03	0.00				1x	d	M	12/08/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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May-23-12 9:22:39 AM

Item ID: D206-642-541

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Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

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**\*1\***

Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC5- Inspect part completeness to step on W/O	0.00							
<b>*260*</b>									
QC	Memo	0.00							
Quality Control	Inspect Nut Plate & Inserts								
270		0.00							
<b>*270*</b>									
HandFinish	HAND FINISHING RESOURCE #1	0.00							
Hand Finishing	Memo	0.00							
	1-Install wearpads & gaskets as per Dwg D3274.								
	2-Install ring as per Dwg D3274								
	A/RSikaflex-291 <u>11122443</u>								
	Sikaflex expire date: <u>13/03</u>								
	3-Inspect for foreign objects as per QSI 024								
	4-Spray inside of tube on both sides of web with LPS-3								
	A/R LPS-3 Batch: <u>1114596</u>								
	5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.								
	A/RSikaflex-291 <u>11122443</u>								
	Sikaflex expire date: <u>13/03</u>								

1 0 DL12-7-28

1 4 11122443

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Item ID: D206-642-541

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**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Replacement Skidtube

Start Date: 23/05/2012 Start Qty: 1.00

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Cust Item ID:

Required Date: 01/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

280

QC5- Inspect part completeness to step on W/O

0.00

**\*280\***

QC

Memo

0.00

Quality Control

290

Identify as per dwg & Stock Location:

0.00

**\*290\***

Packaging

Memo

0.00

Packaging

300

QC21- Final Inspection - Work Order Release

0.00

**\*300\***

QC

Memo

0.00

Quality Control

DAS  
16  
8-23

12/9/11

12/9/11

12/9/11

ME  
12-09-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-23-12 9:22:43 AM

Page 1

Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

## Comments:

IPP Rev:B05.09.23 Revised per D206-642 Rev. JKJ/JLM  
 IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM  
 IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD  
 IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC  
 IPP Rev:F 08-06-02 add comment DD verified by:EC  
 IPP Rev:G 08-10-09 revise details DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2600-1-190

Manufactured No

110

Each

106.0000

1

1

**\*D2600-1-190\***

Extrusion Round 3" 206

\*\*

DE 12/07/11

### Location

### Loc Qty

### Loc Code

HALL

45

69622

45

LG

61

76912

61

D3285-1

Manufactured No

110

Each

42.0000

1

1

**\*D3285-1\***

Cap

\*\*

BE 12/07/12

### Location

### Loc Qty

### Loc Code

LG002

42

52511

1

52647

41

D3282-041

Manufactured No

150

Each

10.0000

1

1

**\*D3282-041\***

Float Web (206L/407)

\*\*

B 12/08/13

### Location

### Loc Qty

### Loc Code

LG

10

80837

1

82651

9

84682

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 2

Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

190

Each

434.0000

12

12

**\*D2649\***

Cross Bolt Spacer

\*\*

12/08/21  
886912 \*12

Location

Loc Qty

Loc Code

LG

291

77574

2

79502

8

79503

270

79564

4

79565

7

LG001

143

65317

1

68224

2

68507

11

71355

2

72704

2

72841

11

73390

8

73857

21

73858

53

73859

4

73860

4

78020

6

78583

2

79566

16

D3275-1

Manufactured No

190

Each

65.0000

12

12

**\*D3275-1\***

Crossbolt Spacer

\*\*

BE 12/08/21  
887982 \*12

Location

Loc Qty

Loc Code

LG002

65

66930

1

83264

64

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Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

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Page 3

Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

250

Each

1,300.000

2

2

**\*CR3212-4-03\***

Cherry Rivet

\*\*

HL 12/08/28

Location

Loc Qty

Loc Code

FP002

352

114859

352

V2

ST331

948

110139

2

119017

946

D3415-041

Manufactured

No

250

Each

34.0000

1

1

**\*D3415-041\***

Nut Plate

\*\*

HL 12/08/28

Location

Loc Qty

Loc Code

ST042

34

67605

1

82151

33

V1

CCR264SS3-3

Purchased

No

250

Each

386.0000

2

2

**\*CCR264SS3-3\***

Cherry Rivet

\*\*

HL 12/08/28

Location

Loc Qty

Loc Code

ST331

386

113973

2

117849

83

119017

301

X2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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# Picklist Print

May-23-12 9:22:43 AM

Page 4

Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

250

Each

3,213.000

78

78

**\*AI S4-1032-130\***

Insert

\*\*

*Handwritten: 12/08/12*

Location

Loc Qty

Loc Code

ST280

205

11122474

*Handwritten: x78*

119084

116

120671

89

ST281

174

120807

36

120837

138

ST282

2834

121269

2834

D3536-15

Manufactured

No

270

Each

19.0000

1

1

**\*D3536-15\***

Gasket

\*\*

*Handwritten: 12/08/12*

Location

Loc Qty

Loc Code

FP002

19

1385604

*Handwritten: x1*

73318

14

81343

5

D3536-23

Manufactured

No

270

Each

15.0000

1

1

**\*D3536-23\***

Gasket

\*\*

*Handwritten: 12/08/12*

Location

Loc Qty

Loc Code

FP002

15

74510

1

83377

14

*Handwritten: 1385295*

*Handwritten: x1*

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Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Picklist Print**

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Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-35

Manufactured No

270

Each

18.0000

1

1

**\*D3536-35\***

Gasket

**\*\***

JL 12/08/28

LocationLoc QtyLoc Code

FP002

18

B85065

XL

81340

7

82065

11

D3536-39

Manufactured No

270

Each

11.0000

1

1

**\*D3536-39\***

Gasket

**\*\***

JL 12/08/28

LocationLoc QtyLoc Code

FP

10

B85870

XL

82252

10

FP002

1

73317

1

D3535-15

Manufactured No

270

Each

16.0000

1

1

**\*D3535-15\***

Wearshoe

**\*\***

JL 12/08/28

LocationLoc QtyLoc Code

FP001

16

B85291

XL

80328

3

81354

13

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Shop Packet Print

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**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3535-35

Manufactured No

270 Each

31.0000 1 1

**\*D3535-35\***

Wearshoe

\*\*

12/08/28

Location

Loc Qty

Loc Code

FP001

31

B86191

67598

1

X 1

70815

1

78873

13

79849

1

82064

1

83638

14

D3535-39

Manufactured No

270 Each

23.0000 1 1

**\*D3535-39\***

Wearshoe

\*\*

12/08/28

Location

Loc Qty

Loc Code

FP001

23

69759

1

74513

4

81359

18

X 1

D3535-23

Manufactured No

270 Each

21.0000 1 1

**\*D3535-23\***

Wearshoe

\*\*

12/08/28

Location

Loc Qty

Loc Code

FP001

21

81355

1

83375

20

B85256

X 1

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Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

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Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3537-3	Manufactured	No	270	Each	27.0000	1	1	
<b>*D3537-3*</b>								
Wearpad								
						**		11/12/08/28

Location

Loc Qty

Loc Code

FP002

27

78836

5

1385-181

x1

81363

22

D3537-1	Manufactured	No	270	Each	100.0000	9	9	
<b>*D3537-1*</b>								
Wearpad								
						**		11/12/08/28

Location

Loc Qty

Loc Code

FG

10

79833

10

1385712

x9

FP002

90

69817

5

81360

59

81362

22

83254

1

83255

3

AN960C10L	<u>NAS1149C0332</u>	Purchased	No	270	Each	0.0000	80	80
<b>*AN960C10I *</b>	R							
washer								
						**		(x80) 11/12/08/28

AN960C416	<u>NAS1149C0463</u>	Purchased	No	270	Each	0.0000	1	1
<b>*AN960C416*</b>	R							
washer								
						**		(x1) 11/12/08/28

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Shop Packet Print

Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Picklist Print

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Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3672-1

Manufactured No

270

Each

1,196.000

2

2

**\*D3672-1\***

Phenolic Washer

\*\*

12/08/28

## Location

## Loc Qty

## Loc Code

ST060

1196

72229

4

76277

192

80369

500

83608

500

x2

AN3C4A

Purchased

No

270

Each

1,717.000

80

80

**\*AN3C4A\***

BOLT

\*\*

12/08/28

## Location

## Loc Qty

## Loc Code

ST350

1717

120187

57

120521

28

120769

38

121205

1000

121556

594

x1122151

x80

AN4C5A

Purchased

No

270

Each

198.0000

1

1

**\*AN4C5A\***

BOLT

\*\*

12/08/28

## Location

## Loc Qty

## Loc Code

ST355

198

112243

138

119017

60

x1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

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Work Order ID: 84785

**\*84785\***

Parent Item: D206-642-541

**\*D206-642-541\***

Parent Item Name: Replacement Skidtube

Start Date: 23/05/2012

Required Date: 01/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2646

Manufactured No

270

Each

34.0000

1

1

**\*D2646\***

Aft Cap

**\*\***

*HL 12/08/20*

## Location

## Loc Qty

## Loc Code

FP002

34

1385443

*xl*

62678

5

68280

5

70945

1

71070

2

73294

1

73825

2

78018

4

79562

14

D3413-1

Manufactured No

270

Each

72.0000

1

1

**\*D3413-1\***

Ring

**\*\***

*HL 12/08/20*

## Location

## Loc Qty

## Loc Code

ST420

4

79233

4

ST464

68

76754

1

80224

6

83307

41

83867

20

*xl*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

RELEASED

07.02.12

DEO ATTACHED

DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED #	APPROVED #	DRAWING NO. D3274	REV. D SHEET 1 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY	SCALE NTS
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

## GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1  
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 84785 M45  
12/05/12SHOP COPY  
RETURN TO  
ENGINEERING

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

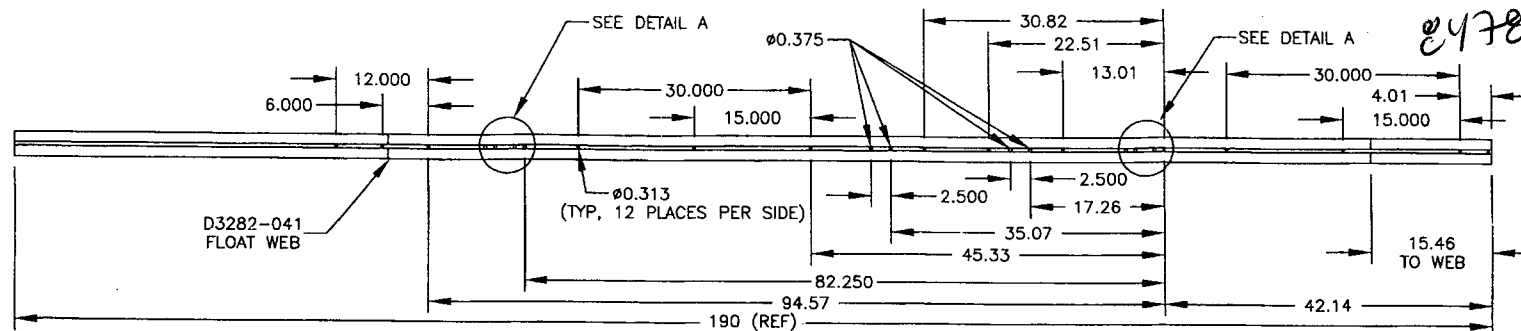
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

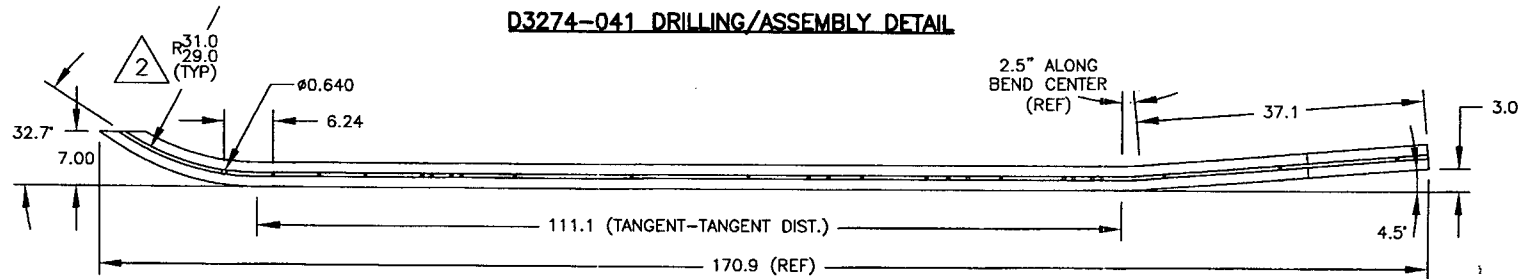
**NOTE:** Date & initial all entries



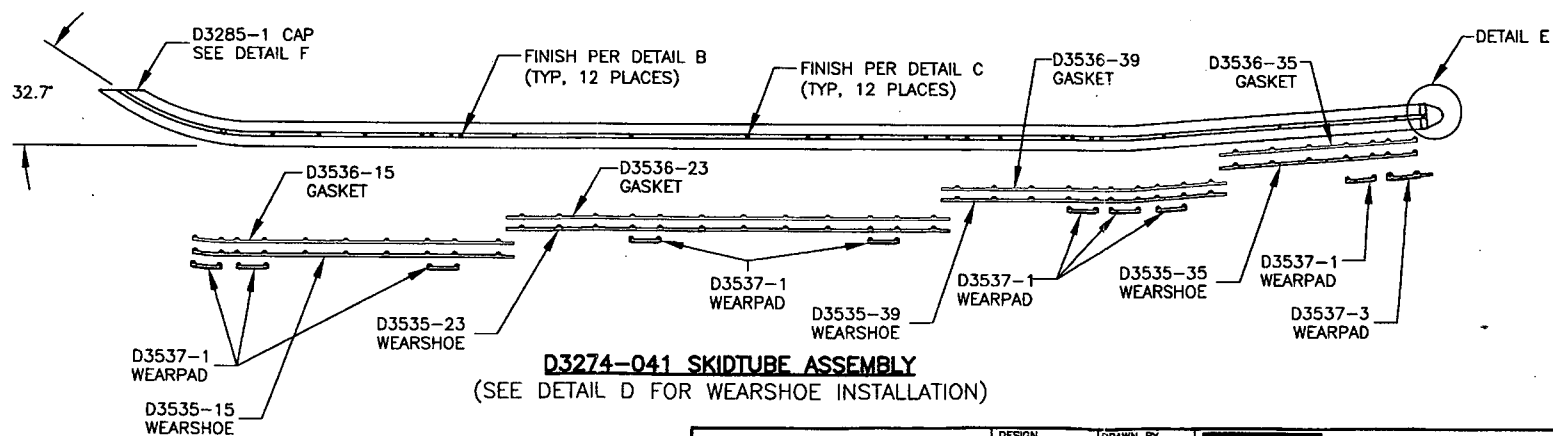
DEO ATTACHED



**D3274-041 DRILLING/ASSEMBLY DETAIL**



**D3274-041 BEND/DRILLING DETAIL**



**D3274-041 SKIDTUBE ASSEMBLY**  
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

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THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		CHECKED	#	APPROVED	#		
		DATE	06.12.19			TITLE SKIDTUBE ASSEMBLY	SCALE 1:15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

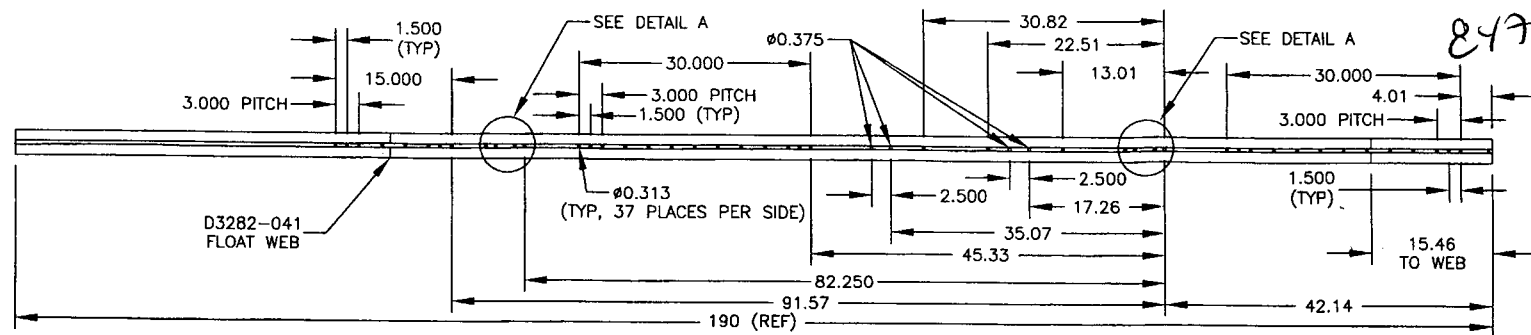
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

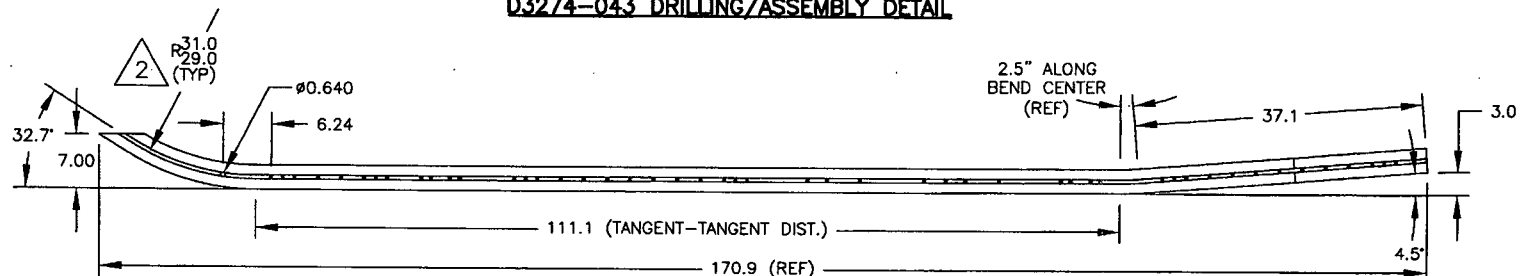
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

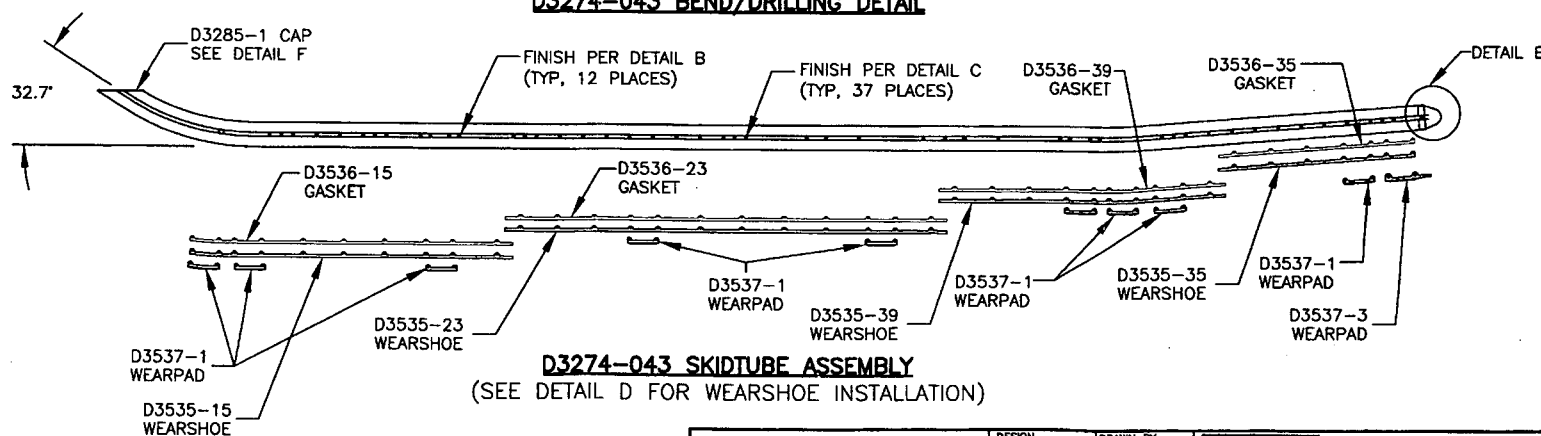
DEO ATTACHED



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



D3274-043 SKIDTUBE ASSEMBLY

(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

07.02.12

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CHECKED	APPROVED	DRAWING NO.	REV. D		
#	#	D3274	SHEET 3 OF 4		
DATE	TITLE		SCALE		
06.12.19	SKIDTUBE ASSEMBLY		1:15		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

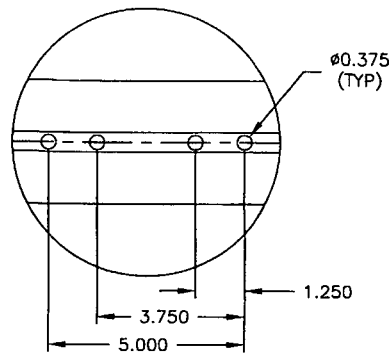
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

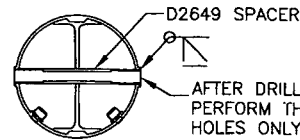
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# **DETAIL A: DRILL DETAIL**

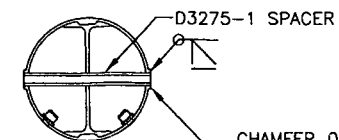


# **DETAIL B** FOR 0.375 HOLES ONLY



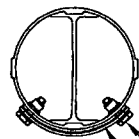
- AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR 0.375  
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
  2. INSERT D2649 SPACER
  3. WELD INTO PLACE AND GRIND FLUSH
  4. C'BORE TO 0.313x0.75 DEEP

# **DETAIL C** FOR 0.313 HOLES ONLY



CHAMFER 0.030x45°  
(TYP)

# **DETAIL D**



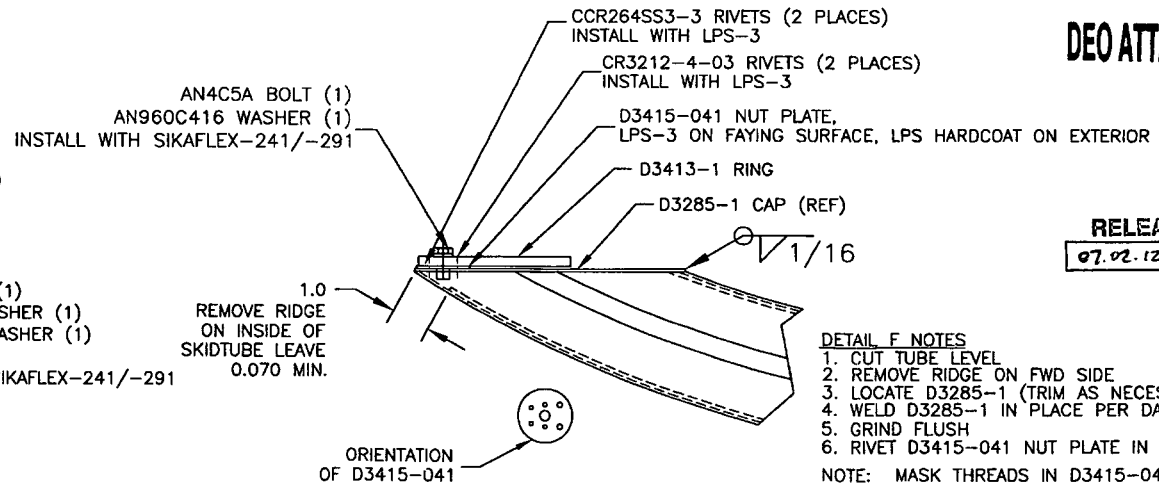
- ALS7-1032-130 INSERT (1)  
AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
(78 PLACES)  
GASKET/WEARSHOE/WEARPAD (REF)

# **DETAIL E**

- AN3C4A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(2 PLACES)  
INSTALL WITH SIKAFLEX-241/-291  
D2646 CAP  
SEAL WITH  
SIKAFLEX-241/291  
ADHESIVE

0.208 (2 PLACES)  
DRILL PRIOR TO INSTALLING  
D2646 CAP  
BORE OUT END OF SKIDTUBE  
TO 0.75 DEPTH AND 0.070 WALL  
0.400

# **DETAIL F: END FINISHING DETAIL**



- DETAIL F NOTES**
1. CUT TUBE LEVEL
  2. REMOVE RIDGE ON FWD SIDE
  3. LOCATE D3285-1 (TRIM AS NECESSARY)
  4. WELD D3285-1 IN PLACE PER DART QSI 004
  5. GRIND FLUSH
  6. RIVET D3415-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

**DEO ATTACHED**

**RELEASED**  
07.02.12

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		DATE	06.12.19	TITLE		SKIDTUBE ASSEMBLY	SCALE 1:3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

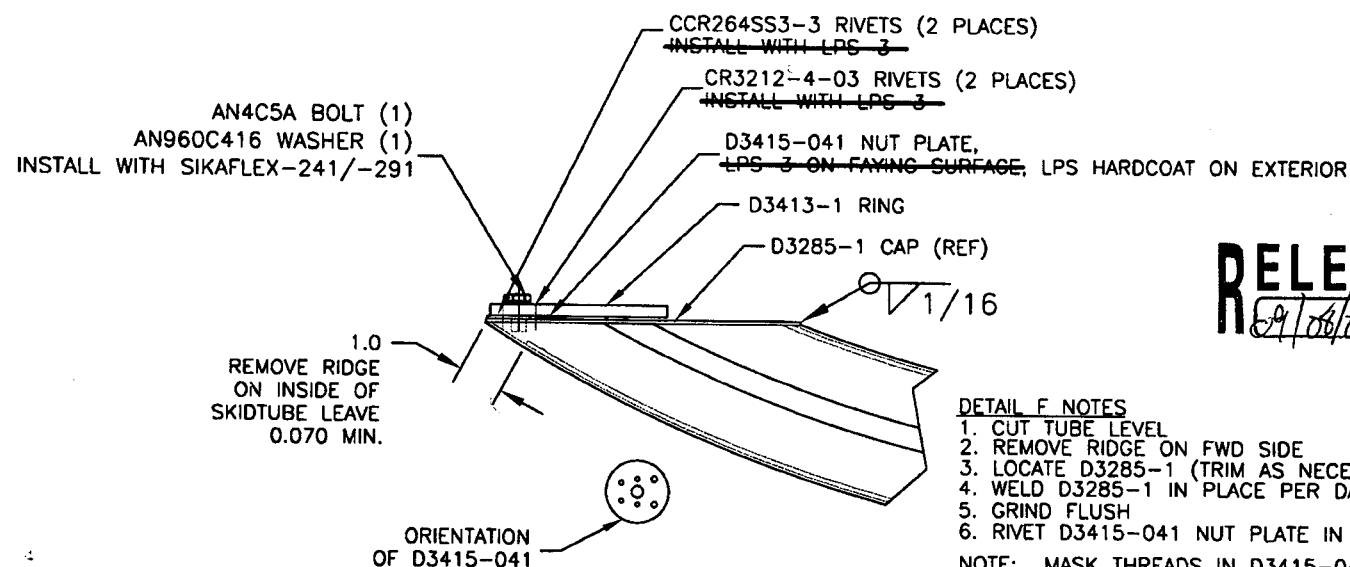
DRAWING NO. D3274	TITLE SKIDTUBE ASSEMBLY	REV. D	DART AEROSPACE USA, INC ENGINEERING ORDER	D.E.O. NO. D3274-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>UP</i>	CHECKED <i>[Signature]</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DE APPR. <i>[Signature]</i>		
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23	DATE 09.06.23		

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: ~~"SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS-3' AFTER FINISH AND INSTALLATION OF INSERTS.~~  
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF  
POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

### DETAIL F: END FINISHING DETAIL



#### DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041  
PRIOR TO FINISH

**RELEASED**  
09/06/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



NO. 299

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job #: B85361  
Part #: 1206-642-541  
Description: Skid  
Welding Process: Tig[ ☒ ] Mig[ ]  
Base material: Alum.  
Current: AC[ ☒ ] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Incomplete Penetration:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Incomplete Fusion:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Cracks:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Overlap (cold lap)	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Undercut:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Pin holes:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Porosity (surface):	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Coloration:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]
Burn through:	pass[ <input checked="" type="checkbox"/> ]	fail[ ]

Qualifier David Lawel Date of Test Coupon 12.07.26  
Welder Barclay Elliott Date of Test Coupon 12-07-26

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

